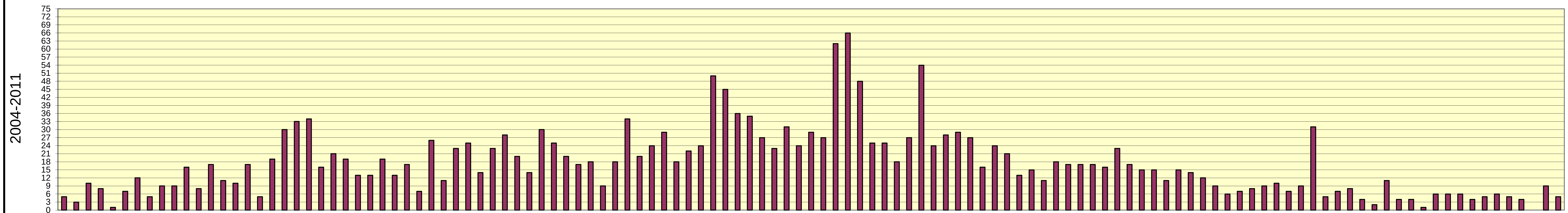
Seasonal Fire Activity Timelines for PSA NW03 - Large Fire = 100+ acres



	6/15	6/16	6/17	6/18	6/19	6/20	6/21	6/22	6/23	6/24	6/25	6/26	6/27	6/28	6/29	6/30
Fires	5	3	10	8	1	7	12	5	9	9	16	8	17	11	10	17
Large fires																

	7/1	7/2	7/3	7/4	7/5	7/6	7/7	7/8	7/9	7/10	7/11	7/12	7/13	7/14	7/15	7/16	7/17	7/18	7/19	7/20	7/21	7/22	7/23	7/24	7/25	7/26	7/27	7/28	7/29	7/30	7/31
Fires	5	19	30	33	34	16	21	19	13	13	19	13	17	7	26	11	23	25	14	23	28	20	14	30	25	20	17	18	9	18	34
Large fires																															

	8/1	8/2	8/3	8/4	8/5	8/6	8/7	8/8	8/9	8/10	8/11	8/12	8/13	8/14	8/15	8/16	8/17	8/18	8/19	8/20	8/21	8/22	8/23	8/24	8/25	8/26	8/27	8/28	8/29	8/30	8/31
Fires	20	24	29	18	22	24	50	45	36	35	27	23	31	24	29	27	62	66	48	25	25	18	27	54	24	28	29	27	16	24	21
Large fires		1					1										1	1	2		1		1			2		1			

	9/1	9/2	9/3	9/4	9/5	9/6	9/7	9/8	9/9	9/10	9/11	9/12	9/13	9/14	9/15	9/16	9/17	9/18	9/19	9/20	9/21	9/22	9/23	9/24	9/25	9/26	9/27	9/28	9/29	9/30
Fires	13	15	11	18	17	17	17	16	23	17	15	15	11	15	14	12	9	6	7	8	9	10	7	9	31	5	7	8	4	2
Large fires	1									1																				

	10/1	10/2	10/3	10/4	10/5	10/6	10/7	10/8	10/9	10/10	10/11	10/12	10/13	10/14	10/15
Fires	11	4	4	1	6	6	6	4	5	6	5	4	0	9	5
Large fires															

Total Fires = 2164
Large Fires = 13

NW03 – West-Central Oregon

Season ending date estimates for Northwest Washington utilized the Predictive Services 7-day Significant Fire Potential Product. Given that the product determines the probability of a significant fire occurring, based on historical dryness levels and historic fire occurrence, the analysis results assume end of season when the product observed "green" (1% probability of a significant fire event) for three or more consecutive days, and where periods of green were never separated by more than a single yellow and or brown day (2 to 7% probability of a significant event).

Large fire definition per NWCC predictive services for PSA NW02 is 100 acres or more. The earliest large fire occurred August 2, 2005 and the latest large fire occurred September 10, 2004.

A TERM file was generated using FireFamily Plus *v.* 4.1. The season was set **May 15 to October 15** for the **years 1994-2012** using the same rationale as above produced these results:

25% of the seasons end on or before September 13
50% of the seasons end on or before September 26
75% of the seasons end on or before October 7
90% of the seasons end on or before October 16
99% of the seasons end on or before October 28

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FireFamily Plus Term Report

Station: SIG - W3
Term Name: NW03
Season Start Day: 5\15
Data Years: 1994 - 2012
Alpha: 8.565111
Beta: 0.007200
R-Squared: 0.943709

Comment:

Term Dates
Year      Day     #Days     Comment
1994      9/27     135
1995      9/24     132
1996      8/26     104
1997      8/14      91
1998      9/ 9     117
1999     10/20     158
2000      9/27     136
2001      9/ 4     112
2002      9/28     136
2003      9/28     136
2004      8/20      98
2005      9/29     137
2006     10/14     152
2007      9/12     120
2008     10/ 2     141
2009      9/29     137
2010     10/ 7     145
2011     10/ 1     139
2012     10/13     152

Key Probabilities
Probability      Date
 0.25          September 13
 0.50          September 26
 0.75          October 07
 0.90          October 16
 0.99          October 28

FF+4.1 Beta 05/21/2013-09:08
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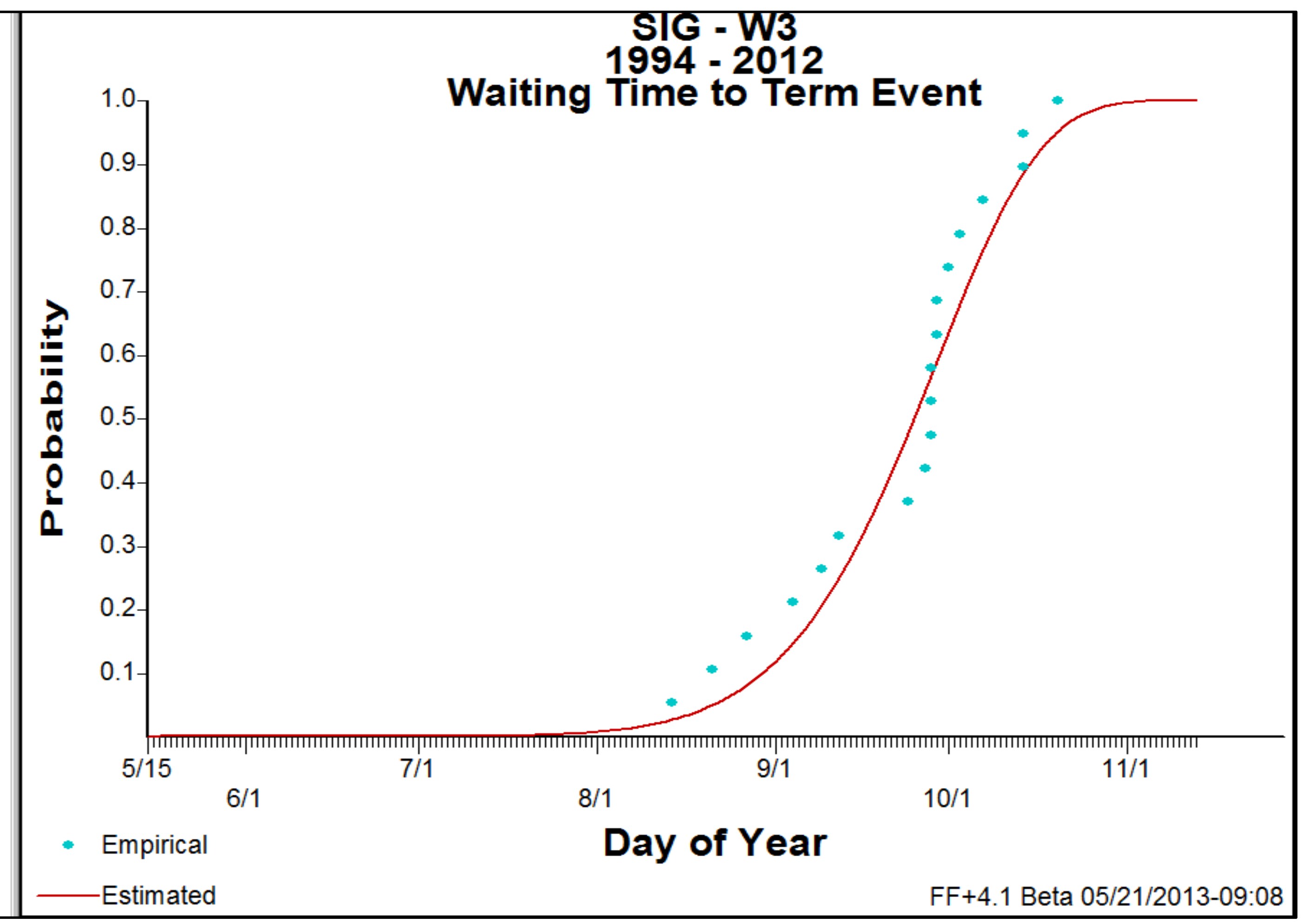

PSA NW03 (W3)

This area represents central portions of western Oregon. Average PSA fuel moistures are determined by the average of the Key RAWS in the zone.

Key RAWS: Wanderer's Peak, Red Box Bench, Yellowstone, Trout Creek, Stayton, High Point, Goodwin Peak, Signal Tree

Each RAWS receives equal weighting for NFDRS Index calculations.
Used to determine DL: ERC for fuel model: G
"Large Fire Day" = A day with an occurrence of at least one 100+ acre fire

"ERC threshold values used for DL determination
Based on June-September data (2000-2011)

DL	ERC Threshold	% of all fire season days	% of all large fire days	Conditional Probability of a large fire
Green (moist)	≤ 28	47%	0%	0%
Yellow (dry)	29 – 49	48%	72%	2%
Brown (very dry)	> 50	5%	28%	7%

Specifics for PSA NW03

Burn Environment – The probability independent of a lightning episode (solely burn environment) is less than 1%. Wind shows virtually no relationship to the occurrence of large fires. ERC 53 or greater and instability are the two key factors especially when a thermal trough pattern sets up. Ongoing fires can become problematic and large fire growth days can be expected.